

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-24 (canceled)

25. (currently amended) In a method for inflating an inflatable safety device via an inflator device wherein a fuel material reacts to form gas generation reaction products, the improvement comprising:

heating a mixture free of free water and containing at least both a water-supplying compound and a water-reactive fuel precursor within the inflator device to form the fuel material in situ.

26. (original) The method of claim 25 additionally comprising:
contacting the formed fuel material with a quantity of compressed gas,
the compressed gas including a quantity of oxidant,

reacting at least a portion of the formed fuel material with at least a portion of the quantity of oxidant to produce heat,

heating a stored quantity of inert gas with at least a portion of the produced heat to form an increased volume of gas and

passing at least a portion of the increased volume of gas into the inflatable safety device to effect the inflation thereof.

27. (withdrawn) The method of claim 25 wherein the fuel precursor is at least one metal element-containing material selected from the group consisting of:

hydrides, carbides, alkoxides and combinations thereof.

28. (withdrawn) The method of claim 25 wherein the fuel precursor comprises a metal alkoxide.

Claim 29 (canceled)

30. (previously presented) In a method for inflating an inflatable safety device via an inflator device wherein a fuel material reacts to form gas generation reaction products, the improvement comprising:

heating a mixture containing at least a water-supplying compound and a water-reactive fuel precursor within the inflator device to form the fuel material in situ, wherein the fuel precursor comprises potassium t-butyl carbonate.

31. (original) The method of claim 25 wherein the water-supplying compound comprises ammonium nitrate.

Claims 32-35 (canceled)

36. (previously presented) The method of claim 25 wherein the water-supplying compound reacts to form water.

37. (previously presented) The method of claim 25 wherein the water-supplying compound and the water-reactive fuel precursor are included as contents contained in a first chamber and wherein said heating step comprises activating an initiator in discharge communication with the contents to form water.

38. (previously presented) The method of claim 37 wherein at least a portion of the formed water reacts with at least a portion of the water-reactive fuel precursor to form a fuel material.

39. (previously presented) The method of claim 37 wherein at least a portion of the water-supplying compound and at least a portion of the water-reactive fuel precursor are contained in the first chamber in direct contact.

40. (previously presented) The method of claim 37 wherein, in an at rest condition, the water-supplying compound is stored segregated from the water-reactive fuel precursor within the first chamber.

41. (previously presented) The method of claim 37 wherein the first chamber is defined at least in part by a perforated housing.

42. (previously presented) The method of claim 41 wherein a liner within the perforated housing maintains the first chamber contents in discharge proximity with the initiator.

Claim 43 (canceled)

44. (withdrawn) The method of claim 25 wherein the water-reactive fuel precursor comprises an alkaline earth metal.

45. (withdrawn) The method of claim 25 wherein the water-supplying compound comprises an inorganic compound with stabilized waters of hydration.

46. (withdrawn) The method of claim 25 wherein the water-supplying compound comprises hydrated calcium oxylate.

47. (currently amended) A method for inflating an inflatable safety device via an inflator device wherein a fuel material reacts to form gas generation reaction products, the method comprising:

reacting, in the absence of free water, a water-supplying compound contained within the inflator device to form water,

contacting a water-reactive fuel precursor contained within the inflator device with at least a portion of the formed water to form the fuel material in situ within the inflator device,

contacting the formed fuel material with a quantity of compressed gas, the compressed gas including a quantity of oxidant,

reacting at least a portion of the formed fuel material with at least a portion of the quantity of oxidant to produce heat,

heating a stored quantity of inert gas with at least a portion of the produced heat to form an increased volume of gas and

passing at least a portion of the increased volume of gas into the inflatable safety device to effect the inflation thereof.

48. (withdrawn) The method of claim 47 wherein the water-reactive fuel precursor is at least one metal element-containing material selected from the group consisting of:

hydrides, carbides, alkoxides and combinations thereof.

49. (withdrawn) The method of claim 48 wherein the water-reactive fuel precursor comprises a metal alkoxide.

50. (withdrawn) The method of claim 49 wherein the water-reactive fuel precursor comprises an alkali metal.

51. (withdrawn) The method of claim 49 wherein the water-reactive fuel precursor comprises an alkaline earth metal.

Claim 52 (canceled)

53. (currently amended) ~~The A method of claim 47 for~~
inflating an inflatable safety device via an inflator device wherein a fuel material
reacts to form gas generation reaction products, the method comprising:

reacting a water-supplying compound contained within the inflator device to form water,

contacting a water-reactive fuel precursor contained within the inflator device with at least a portion of the formed water to form the fuel material in situ within the inflator device,

contacting the formed fuel material with a quantity of compressed gas, the compressed gas including a quantity of oxidant,

reacting at least a portion of the formed fuel material with at least a portion of the quantity of oxidant to produce heat,

heating a stored quantity of inert gas with at least a portion of the produced heat to form an increased volume of gas and

passing at least a portion of the increased volume of gas into the inflatable safety device to effect the inflation thereof,

wherein the water-reactive fuel precursor comprises potassium t-butyl carbonate.

54. (previously presented) The method of claim 47 wherein the water-supplying compound comprises ammonium nitrate.

55. (withdrawn) The method of claim 47 wherein the water-supplying compound comprises an inorganic compound with stabilized waters of hydration.

56. (withdrawn) The method of claim 55 wherein the water-supplying compound comprises hydrated calcium oxylate.

57. (currently amended) A method for inflating an inflatable safety device via an inflator device wherein a fuel material reacts to form gas generation reaction products, the method comprising:

reacting a water-supplying compound contained within the inflator device to form water, the water-supplying compound selected from the group consisting of ammonium nitrate and an inorganic compound with stabilized waters of hydration,

contacting a water-reactive fuel precursor contained within the inflator device with at least a portion of the formed water to form the fuel material in situ within the inflator device, the water-reactive fuel precursor comprising ~~selected from the group consisting of:~~

a) at least one metal element-containing material selected from the group consisting of hydrides, carbides, alkoxides and combinations thereof and

b) a carbonate-containing material,

contacting the formed fuel material with a quantity of compressed gas, the compressed gas including a quantity of oxidant,

reacting at least a portion of the formed fuel material with at least a portion of the quantity of oxidant to produce heat,

heating a stored quantity of inert gas with at least a portion of the produced heat to form an increased volume of gas and

passing at least a portion of the increased volume of gas into the inflatable safety device to effect the inflation thereof.

58. (previously presented) The method of claim 57 wherein the water-reactive fuel precursor comprises a metal alkoxide.

59. (previously presented) The method of claim 57 wherein the water-reactive fuel precursor comprises an alkali metal.

60. (previously presented) The method of claim 57 wherein the water-reactive fuel precursor comprises an alkaline earth metal.

61. (previously presented) The method of claim 57 wherein the water-reactive fuel precursor comprises potassium t-butyl carbonate.

62. (previously presented) The method of claim 57 wherein the water-supplying compound comprises ammonium nitrate.

63. (previously presented) The method of claim 57 wherein the water-supplying compound comprises hydrated calcium oxylate.

64. (new) The method of claim 25 wherein the water-reactive fuel precursor comprises at least one first component selected from the group of metals and organometallic compounds and at least one second component selected from the group of carbonates and bicarbonates.

65. (new) The method of claim 25 wherein the water-reactive fuel precursor comprises an alkali metal.

66. (new) The method of claim 47 wherein the water-reactive fuel precursor comprises at least one first component selected from the group of metals and organometallic compounds and at least one second component selected from the group of carbonates and bicarbonates.